

BRADY et al
Serial No. 09/914,460
Response to Office Action dated May 16, 2006

Amendments to the Drawings:

Figures 1 and 2 have been designated with the legend "Prior Art". No new matter is added.

Attachments: Replacement Drawing Sheet

Annotated Drawing Sheet Showing Changes

Remarks

Reconsideration and allowance of the subject patent application are respectfully requested.

Non-elected claims 83-100 and 119-131 have been canceled without prejudice or disclaimer. Applicants reserve the right to file divisional application(s) directed to the subject matter of the non-elected claims.

As requested, Figures 1 and 2 have been designated with the legend "Prior Art".

The specification has been amended to provide headings in a more traditional U.S. format.

Claims 101-118 were rejected under 35 U.S.C. Section 112, second paragraph, as allegedly being indefinite. These claims have been amended to provide antecedent basis as appropriate. Based on these amendments, withdrawal of the Section 112, second paragraph, rejections is respectfully requested. These claims are not otherwise rejected and are therefore believed to be allowable.

As requested by the Examiner, other claims have been amended to address antecedent basis issues.

Applicants acknowledge with appreciation the indication that claims 77, 80 and 82 contain allowable subject matter. Claim 76 has been amended to incorporate the subject matter of claim 77; claim 79 has been amended to incorporate the subject matter of claim 80; and claim 81 has been amended to incorporate the subject matter of claim 82. Consequently, claims 76, 79 and 81 are now believed to be allowable.

Claims 76, 78, 79 and 81 were rejected under 35 U.S.C. Section 102(b) as allegedly being "anticipated" by the Highnam et al. article. While not acquiescing in this rejection, claims 76, 79

and 81 have been amended to incorporate allowable subject matter as noted above.

Consequently, the rejection based on the Highnam et al. with respect to these claims is moot.

As explained below, Applicants respectfully submit that the Highnam et al. article does not anticipate claim 78 which as now been written in self-standing independent form.

The office action rejected claim 78 apparently on the basis that page 303, right column, first paragraph of the Highnam et al. article “teaches Lucite”, presumably believing that this teaching is in the context of calibrating the film-screen combination (i.e., measuring what image density on the film is caused by what X-ray intensity). However, this section of the Highnam et al. article is actually referring to measuring what proportion of the radiation reaching a given detector position is scatter rather than primary radiation. It is not disclosing the use of a Lucite step wedge to measure what image density on the film is caused by what X-ray intensity (i.e., to calibrate the film-screen) as required by claim 78. This is clear from the section referred to in the office action which says:

Barnes and Brezovich measured the number of scattered and primary photons reaching an NaI(Tl) crystal detector having passed through a circular Lucite phantom.

There is no disclosure or suggestion of going on to use a lucite step wedge to calibrate the film-screen, which is what claim 78 is concerned with.

In the Highnam et al. article, the results of use of the step wedge are used to derive a weighting mask which represents where the photons come from – see page 304, right column, first paragraph:

This equation allows the percentage of the total amount of scattered radiation coming from the hollow cylinder with the width of a pixel and various radii to be estimated. This percentage forms the basis for deriving a weighting mask which represents where in a neighbourhood around each pixel the scattered photons

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come from. This derivation assumes that the mask derived for Lucite is similar to that which would be found for fat and interesting tissue.

Removal of scatter is a completely different step in the process from thinking about and measuring the response of the film-screen to different intensities of X-rays.

Consequently, Applicants respectfully submit that the Highnam et al. article does not anticipate claim 78.

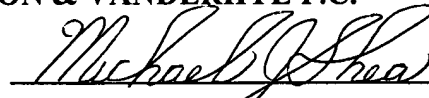
New claims 132 and 133 have been added. Claim 132 incorporates subject matter along the lines of allowable claims 77, 80 and 82 and thus claim 132 is believed to be allowable. Claim 133 includes features similar to those in claims incorporates subject matter along the lines of claims 101, 107, and 113, for example. Because these claims have not been rejected based on prior art, claim 133 is likewise believed to be allowable.

The pending claims are believed to be allowable and favorable office action is respectfully requested.

Respectfully submitted,

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Fig.1. *PRIOR ART*

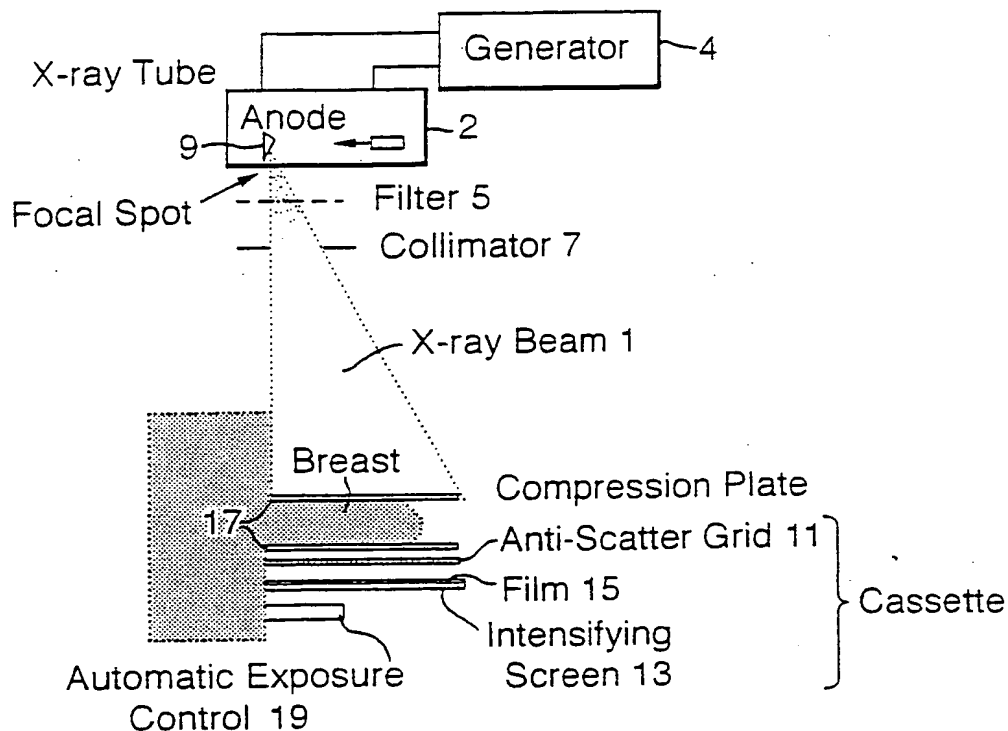


Fig.2. *PRIOR ART*

